Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A method of reducing a column clock time in a liquid crystal display, comprising the steps of:

buffering a pixel row;

detecting if the buffered pixel row has all unused pixels;

driving all pixels on a corresponding imager row to black simultaneously if the buffered pixel row has all unused pixels; and

transferring the buffered pixel row to the corresponding imager row if the buffered pixel row has used pixels.

- 2. (previously presented) The method of claim 1, wherein the pixels on the corresponding imager row are driven to black by applying a common DC voltage to the imager row.
- 3. (previously presented) The method of claim 2, wherein the steps of driving all pixels on the corresponding imager row comprises the steps of switching all pixels on the imager row to a first voltage during the negative phase of a pixel and switching all pixels on the imager row to a second voltage during a positive phase of the pixel.
- 4. (previously canceled)
- 5. (original) The method of claim 3, wherein the first voltage is 16 volts and the second voltage is 0 volts.
- 6. (original) The method of claim 1, wherein the method further comprises the step of randomly accessing a start of a plurality of rows in the liquid crystal display.
- 7. (previously canceled)
- 8. (previously canceled)

- 9. (previously canceled)
- 10. (previously canceled)
- 11. (previously canceled)
- 12. (previously canceled)
- 13. (currently amended) A method of reducing a column clock time in a liquid crystal display, comprising the steps of:

randomly accessing a row in a liquid crystal display imager having a plurality of rows; storing a pixel row in a buffer, the stored pixel row corresponding to the randomly accessed row;

detecting if the stored pixel row contains active video pixels substantially all unused pixels;

selectively addressing the randomly accessed row if the stored pixel row contains active video pixels and avoiding addressing the randomly accessed if the stored pixel row contains substantially all unused pixels.

- 14. (previously presented) The method of claim 13, further comprises the steps of driving all pixels in an avoided row to black by switching all pixels on the avoided row to a first voltage during a negative phase of the given pixel and switching all pixels on the avoided row to a second voltage during a positive phase of the pixel.
- 15. (previously presented) A liquid crystal display imager system, comprises:
 - a buffer for storing pixel rows;
 - a row address selector;
- an imager having a plurality of rows, the imager being coupled to the buffer and the row address selector; and
- a random access controller coupled to the buffer and the row address selector, the controller detects whether pixel rows stored in the buffer contains all unused pixels, and avoids

Ser. No. 10/003,543 PU000147

addressing corresponding rows in the imager if stored pixel rows having all unused pixels are detected.

- 16. (previously presented) The liquid crystal display imager system of claim 15, wherein the liquid crystal display imager system further comprises a switching mechanism that drives all pixels on a given imager row to black simultaneously if the corresponding row in the buffer has all unused pixels.
- 17. (previously presented) The liquid crystal display imager system of claim 16, wherein the row address selector progresses through all rows of the imager and the switching mechanism simultaneously drives all pixels on any imager row to black if the corresponding row in the buffer has all unused pixels until a row with active video is detected in the buffer.
- 18. (previously presented) The liquid crystal display imager system of claim 16, wherein the switching mechanism drives the pixels on the imager row to black by applying a common DC voltage to the imager row.
- 19. (previously presented) The liquid crystal display imager system of claim 16, wherein the switching mechanism drives all pixels on a given imager row to black by switching all pixels on the given imager row to a first voltage during the negative phase of a pixel and switches all pixels on the given imager row to a second voltage during a positive phase of the pixel until the row address selector reaches an active video row.
- 20. (previously presented) The liquid crystal display imager system of claim 16, wherein the row address selector operates at a faster speed while incrementing through imager rows having all pixels being driven to black and operates at a slower speed while incrementing through imager rows having active video.

21. (previously canceled)

Ser. No. 10/003,543 PU000147

22. (original) The liquid crystal display imager system of claim 15, wherein the system is for a liquid crystal on silicon crystal display.